WILDLAND FIRE MANAGEMENT REFERENCE MANUAL - 18 Fire Management Plans

Chapter 4 Page 1

FIRE MANAGEMENT PLANS

The procedures for developing Fire Management Plans and an outline of the contents are found in this section.

GENERAL

Director's Order #18, section 5.2.a., states, "Every park area with burnable vegetation must have a fire management plan approved by the Superintendent." The overall resource management objectives for an NPS unit must guide Fire Management Plans. The resource management objectives will determine whether and how fire will be managed. The activities covered by the Fire Management Plan will be given due consideration in balance with other NPS unit management activities. Fire Management Plans must directly relate to the Natural and Cultural Resource Management Plans and help achieve resource management objectives. Fire Management Plans should be coordinated with neighboring land management agencies.

The FMP will incorporate a programmatic approach to the National Environmental Policy Act of 1969 (NEPA) that covers all activities described in the fire management plan. This will reduce the need for NEPA documents for individual projects addressed in the FMP. Additional NEPA (Environmental Assessments (EAs) or Categorical Exclusions (CEs) for specific burns) would need to be done only if external controversial issues arise. Park superintendents will address issues internal to the park unit.

The superintendent is responsible for assuring policy compliance and the technical and operational soundness of a fire management plan before he or she approves it. In doing so, he or she should seek the review and advice of the regional staff. The NPS unit will provide a copy of the approved Fire Management Plan and all subsequent amendments to the Fire Management Program Center (National Interagency Fire Center (NIFC), Boise, Idaho). Each NPS unit should review their fire management plan annually to ensure that it continues to conform to current laws, objectives, procedures and strategies. A review is recommended annually and revision is recommended every five years.

Fire Management Plans are written to be understood and carried out by the NPS unit staff. These plans are operational in nature. The plans are public documents. Extensive supporting information referenced in the FMP, may be located elsewhere (i.e., in an appendix or addendum).

OUTLINE FOR FIRE MANAGEMENT PLANS

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I. INTRODUCTION

- A. State the reasons for developing this plan, including the requirement that all areas with vegetation capable of sustaining fire will develop a Fire Management Plan (DO-18).
- B. State that the plan will help achieve resource management and fire protection goals as defined in the General Management Plan, Natural and Cultural Resource Management Plan.
- C. State that the plan meets National Environmental Policy Act (NEPA) and National Historical Preservation Act (NHPA) requirements, and provide a brief description of the compliance actions.
- D. Cite authorities for implementing this plan (See DO-18 for list of authorities).

II. NPS POLICY AND RELATION TO OTHER PLANS

- A. Reference NPS Management Policies concerning fire management, and include relevant statements from Management Policies such as: "the presence or absence of natural fires within a given ecosystem is recognized as a potent factor...."
- B. Relate this plan to the enabling legislation and the purpose of the NPS unit.
 - 1. Explain why the unit was established.
 - 2. Briefly summarize the significant resources and values of the unit.
- C. State the objectives of the NPS unit's General Management Plan (GMP) as they pertain to fire management.
- D. State the objectives of the NPS unit's Cultural and Natural Resource Management Plan as they pertain to fire management. Quote the pertinent objectives from the Resource Management Plan (RMP).

- E. State how the Fire Management Plan will help meet objectives of the GMP and Resource Management Plans.
- F. State that the Fire Management Plan is a detailed program of action to implement fire management policies and objectives.

III. SCOPE OF WILDLAND FIRE MANAGEMENT PROGRAM

- A. List the unit's fire management goals. These goals should be programmatic in nature, such as:
 - (<u>Example only</u>): "Firefighter safety is the highest priority of every fire management activity."
 - (<u>Example only</u>): "Suppress all unwanted and undesirable wildland fires regardless of ignition source to protect the public, private property, natural, cultural and historic resources of the unit."
 - (<u>Example only</u>): "Use wildland and prescribed fire where and when appropriate as a tool to meet resource objectives within the unit."
 - See Director's Order 18, Section 4.4,a-1, for other objectives.
- B. Discuss the range of Wildland Fire Management Elements to be applied.
 - 1. Wildland Fire.
 - Wildland fire suppression
 - Wildland fire use
 - 2. Fuels Management (hazard fuels, ecosystem management, etc.).
 - Prescribed Fire
 - Non-Fire Applications
- C. Description of Fire Management Units (FMUs).

Delineate Fire Management Units (FMUs) on a map. Fire Management Units are any land management area definable by objectives, topographic features, access, values-to-be-protected, political boundaries, fuel types, or major fire regime groups, etc., that sets it apart from management characteristics of an

Version 2.0 August 10, 2001 adjacent unit. These units may have dominant management objectives and preselected strategies assigned to accomplish these objectives. The number of FMUs should be kept to the minimum.

1. FMU Identifier.

- a. Discuss physical and biotic characteristics of administrative unit (vegetation, soil, aquatic resources, air, wildlife, cultural and historical resources, T&E species, and real property).
- b. Strategic and measurable fire management objectives that are specific to FMU.
 - (<u>Example only</u>): "Contain 95% of unwanted wildland fires at less than 10 acres in size in the FMU (minimize fire presence)."
 - (<u>Example only</u>): "Restore fire to 25% of the fire dependent ecosystems (maximize fire presence) to meet resource management objectives through selection of the appropriate management response to wildland fire occurrence."
- c. Management considerations to operational implementation.
 - (<u>Example only</u>): Ensure that air quality requirements are considered in developing implementation plans.
 - (<u>Example only</u>): No unacceptable impact to cultural resources or T&E species.
 - (<u>Example only</u>): Ensure socio-political economic impacts are considered in developing implementation plans.
- d. Discuss the historic role of fire. Discuss fire ecology and fire history of the park ecosystem, including determination of natural fire cycle, suppression history and other land use activities that have affected fire management. Delineate historic fire regime groups and their current condition as low, moderate, or high risk to loss of key components that define them.
- e. Discuss the wildland fire management situation. Discuss the specific fire management situation for this administrative unit, including:

- 1) Historical weather analysis.
- 2) Fire season.
- 3) Fuel characteristics in relation to fire behavior; discuss any changes in fuel characteristics during fire season due to drying, phenology, etc.
- 4) Fire regime alteration.
- 5) Control problems.
- 6) Describe values to be protected, managed, or at risk; adjacent landowners and agencies, Class I air quality areas, etc. This description should be brief and focused on park characteristics that relate directly to fire management. Reference more extensive descriptions of the unit's natural environment that exist in other documents.

IV. WILDLAND FIRE MANAGEMENT

- A. General Management Considerations.
 - 1. Evaluate GMP direction to determine how wildland fire will be managed.

Present a brief and defensible rationale for all fire management strategies managers intend to apply to wildland fire occurrence in each FMU. This discussion should relate the fire strategies to the land management planning objectives for the management areas or units identified in the GMP and RMP. The strategy must be consistent with fire management capabilities and should consider the current and predicted conditions affecting fire behavior. Preplanned decisions based on historical fire behavior indices should be considered to most efficiently aid in decisions requiring appropriate management responses of suppression.

Fire managers will use these strategies for expediting the decision-making process to determine whether to respond to an initial action as an emergency or whether the wildland fire ignition will be used for resource benefit.

2. Implementation procedures.

State that a Wildland Fire Implementation Plan (WFIP) will be initiated for all wildland fires and determine who will be responsible for completing the <u>Stage I: Initial Fire Assessment</u> that provides the decision framework for selecting the appropriate management response. Operational management decisions are described in the WFIP. Specific WFIP requirements are outlined in Chapter 4 of the Wildland and

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Prescribed Fire Management Policy Implementation Procedures Reference Guide hereafter referred to as the Implementation Guide.

The <u>Stage I: Initial Fire Assessment</u> includes the <u>Fire Situation</u> and the <u>Decision Criteria Checklist</u>. It documents the current and predicted situation, documents all appropriate administrative information, and aids managers by providing them with decision criteria to make the initial decision whether to manage the fire for resource benefits or to take suppression action. In addition to the checklist shown in the Implementation Guide, identify here other significant management criteria that should be considered in the decision process. Only the most complex fires being managed for resource benefits will require completion of all stages of a WFIP.

B. Wildland Fire Use.

Wildland fire use must be based soundly on management objectives (public and firefighter safety, cultural and natural resource objectives, etc.) and may include the full range of fire management strategies on a fire's entire perimeter.

- 1. Describe the objectives of wildland fire use.
- 2. State what parameters will be used to make informed management decisions for wildland fire use. Include specific criteria that would be used to make a decision on wildland fire use during the WFIP process such as time of year, position of ignition within the FMU, ERC/BI index, etc. The standards for the frequency of monitoring these factors should also be stated. Also include special considerations and risk assessment. Define the park's weather monitoring capability and network, including applicable cooperators (list all NPS and other organization weather stations, locations, applicable fuel models, etc.) that will be used in decision-making.
- 3. Describe all pre-planned wildland fire use implementation procedures. Include all annual pre-season and fire season activities necessary to prepare for and implement the wildland fire use program, such as interagency agreements, permits, compilation of weather/severity data, training needs, etc. Where possible, clearly identify all pre-planned actions (see Decision Criteria checklist, Short-term Implementation Actions, Implementation Guide, Chapter 4, Section C-2) and physically display pre-planned Maximum Manageable Areas (MMAs) at the FMU planning-level scale.
- 4. Provide a general description for all wildland fire use implementation procedures that are not pre-planned.

- Include procedures for periodic assessment of wildland fire use applications (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).
- Include outlines and requirements for the preparation of wildland fire implementation plans, other project level plans, and documentation (e.g. Wildland Fire Implementation Plan, Wildland Fire Situation Analysis) (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide).
- 5. Potential impacts of the plan implementation, both on and off site. Include environmental, social, and economic impacts, and discussion of any negative impacts and how they may be mitigated.
- 6. Identify the staff positions who must be present to implement and manage the wildland fire use program including names of qualified FUMA, RXFA and other management personnel. Identify the staff positions responsible for initiating and implementing steps in the decision process necessary to support the appropriate management response. Identify key resource draw down levels that will preclude wildland fire use implementation. State the relationship of wildland fire use implementation to the park's step-up staffing plan (see Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide Chapter 4, Section C-1, Decision Criteria Checklist Initial Go/No Go Checklist).
- 7. Include provisions for public information and interpretation of the wildland fire use program. Develop a list of key agency, interagency, state and congressional delegation contacts for inclusion in each WFIP at the Stage III level.
- 8. Develop a standard outline of contents for a permanent project record for each wildland fire use application. Include as a minimum:
 - a. Approved planning document that guided management actions (e.g. Wildland Fire Implementation Plan, WFSA). Include all amendments and revisions.
 - Monitoring reports and summaries of findings, along with a summary of all monitoring activities including a monitoring schedule (level 1 and 2 monitoring).
 - c. Revalidation and certification documents.
 - d. Funding codes and cost accounting.

- e. Project maps. Permanently map and archive all fires greater than 100 acres.
- f. Other information as appropriate for the situation such as photo points.
- 9. Explain the funding/fiscal tracking of costs associated with wildland fire.
- C. Wildland Fire Suppression.
 - 1. Describe the range of potential fire behavior.
 - 2. Preparedness Actions.
 - a. Describe fire prevention activities.
 - b. Identify annual training activities needed by fire staff (e.g. annual safety refresher, etc.).
 - c. Describe the work needed annually to ensure the fire readiness of equipment and supplies.
 - d. Fire weather and fire danger.
 - 1) Weather stations.

Provide weather station catalog information and the fuel model used for identifying thresholds. Briefly explain how each station's catalog was developed. Weather station catalog information can be included in the appendix.

2) NFDRS.

Select an index or indices for trend monitoring. Identify the means, extremes, and percentiles for the index or indices for comparison. Describe weather and National Fire Danger Rating System (NFDRS) thresholds for natural ignition operations and prevention actions. Describe the thresholds determined by Palmer Drought Indices, METAFIRE, KBDI, ERC, BI, FIRES, preparedness levels, and so forth.

This is a key element, as it will drive most all fire management actions on the ground. Discuss the process for developing thresholds used for prevention, initial response, large fire actions and prescribed fire activities. Include any charts used in the decision-making process. Explain how the charts are to be used.

- e. Describe step-up staffing plan.
 - Describe each preparedness level based on staffing classes substantiated by NFDRS indexes
 - Describe all actions planned and authorized at each level (includes discussions of preparedness, prevention, detection, information and education)
 - For actions taken at each preparedness level, describe the funding source and authority used to implement the actions
- 3. Explain the pre-attack plan (see RM-18, Chapter 7, Exhibit 3).
- 4. Initial Attack.

Initial attack is an aggressive suppression action consistent with firefighter and public safety and values to be protected. This strategy is applied as either the only available response when fire management plans have not been completed or as the result of Stage I analysis under the appropriate management response process.

a. Information used to set initial attack priorities.

List of information sources for setting suppression priorities: net value change tables, timber type maps, wildlife habitat, archaeological sites, fuel maps, smoke/air quality impact models, sensitive natural resources (e.g., riparian areas). Include preplanned dispatch strategies.

b. Criteria for the appropriate initial attack response consistent with GMP/RMP objectives.

Determine and document the criteria that should be used to define the intensity of response warranted based on the conditions and the effects.

c. Confinement as an initial attack suppression strategy.

State that a confinement strategy may be implemented as the initial attack action as long as it is not used to meet resource objectives. Confinement is selected in lieu of wildland fire use to maximize firefighter safety, minimize

suppression costs, minimize cost + loss in low valued and commodity resource areas, and to maximize availability of critical suppression and management resources during periods of high fire danger associated with fire in highly valued resource areas.

State that confinement can also be a strategic selection through the WFSA process when the fire is expected to exceed initial attack capability or planned management capability. When confinement is selected as the initial action, the same management process applies as for wildland fire use decisions. Prepare a WFIP in stages as the fire or management considerations dictate.

- d. Typical fire response times on unit by resource type and time of year of fire danger.
- e. Restrictions and special concerns by management area.

Summarize and reference limitations on equipment use, aircraft use, chemical fire retardant, tracked equipment, plows, and fireline explosives. List "delegated authority" responsibilities for restricted use exemptions.

- f. Include such issues as tribal relationships, local government issues, the hiring of local people, recycling, local issues in implementing firefighter R&R, etc.
- 5. Extended Attack and Large Fire Suppression.
 - Determine extended attack needs.
 - b. Implementation plan requirements WFSA development.
 - Complexity decision process from initial attack to extended attack.
 - d. Unit example of "delegation of authority" for Incident Commander.
- 6. Exceeding existing WFIP selecting a new strategy.

Explain the conditions that cause an existing WFIP to be exceeded. This occurs when wildland fires cannot be controlled during the initial suppression response action or where the appropriate management response has not been successful. These may also be prescribed fires where the implemented prescribed fire is unsuccessful. The Wildland Fire Situation Analysis is initiated at this stage. (Note

special provisions applicable to wildland fire use on page 50, Chapter 4, Wildland and Prescribed Fire Management Policy Implementation Procedures Guide.)

- 7. State the requirement for minimum impact suppression tactics as the policy for all fire management activities on NPS lands. Describe specific minimum impact suppression guidelines for this NPS unit (summarize here and include full guidelines and details in appendix or addendum).
- 8. Describe short and long-term rehabilitation guidelines and procedures (include details in appendix or addendum if extensive). These apply to all fire management activities.
- 9. Detail the completion and tracking of records and reports. Include a list of required reporting and the title of the position responsible for their completion.

V. FUELS MANAGEMENT

A. Describe the scope of the long-term fuels management program including prescribed fire and non-fire applications for fuel treatment and ecosystem management. Specific information for hazard fuel treatment, (including timing, sequence, specific location, interagency project planning, and local agreements), may be appended to the Fire Management Plan as a Hazard Fuel Plan (see RM-18, Chapter 10).

State the link from Resource Management Plans that identify needs and objectives of fuels management. Define fuels management programmatic goals (refer to section IV, in this chapter). Clarify how fuels management proposes to achieve FMP goals.

B. Prescribed Fire.

- 1. Describe annual activities to prepare for and implement the program (do not include copies of specific prescribed fire unit burn plans).
- 2. Relate the long-term prescribed fire strategy to each Fire Management Unit, and display planned burn units by fire regime group and condition class.
- 3. Identify numbers and kinds of qualified personnel necessary to plan and execute the proposed annual prescribed fire program.
- 4. Define the weather, fire behavior and fire effects monitoring associated with prescribed fire applications. Include both short term and long term effectiveness monitoring objectives, and any issues or concerns identified in related NEPA documents. Verify and monitor for the measurable objectives identified for

prescribed fire, (see Section III, C, "Description of Fire Management Units"). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.

- 5. Provide format for critiques of prescribed fire projects.
- 6. Describe reporting and documentation requirements for accomplishments and escaped fires.
- 7. Develop historic fuel treatment map of post activities that effect planned actions.
- C. Prescribed fire burn plan.

Explain the local prescribed fire burn plan requirements and include a copy of the burn plan the Unit uses in the appendix. A description of the required prescribed burn plan elements can be found in Chapter 4 of the Implementation Procedures Reference Guide.

D. Exceeding existing Prescribed Fire Plan.

There may be prescribed fires where the implemented prescribed fire is unsuccessful. In these situations follow RM 18, chapter 9, to develop a Wildland Fire Situation Analysis. (Note special provisions applicable to wildland fire use on page 50, Chapter 4 of the Implementation Procedures Reference Guide.)

- E. Air Quality and Smoke Management.
 - 1. Describe pertinent air quality issues.
 - 2. Develop a program of action to manage smoke that complies with the requirements of the Clean Air Act and any additional issues identified through the NEPA process. Include all potential measures and techniques to prevent or mitigate adverse smoke events. A detailed smoke management plan may be developed cooperatively with the state regulatory agency responsible for regulatory air quality management for each park and include in the appendix to the FMP or as an addendum. Describe any pertinent air quality issues, including:
 - a. Location of Class I airsheds.
 - b. Description of pre-identified smoke sensitive areas.
 - c. Local and regional smoke management restrictions and procedures.

F. Non-Fire Applications.

Describe the scope of non-fire treatment activities related to fuel hazard reduction and the total fire management program.

1. Mechanical treatment and other applications.

Describe the mechanical treatment program and include such items as:

- a. Describe annual activities to prepare for and implement the program (do not include copies of specific project plans).
- b. Equipment and seasonal use restrictions by management area or FMU, including restrictions due to weather, species sensitivity, or other concerns that may affect equipment use.
- c. Define the effects monitoring required. Include both short term and long term monitoring objectives, and any issues or concerns identified in related NEPA documents. Verify and monitor for the measurable objectives identified for non-fire applications, (see Section III, C, "Description of Fire Management Units"). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.
- d. Provide format for critiques of mechanical treatment projects.
- e. Cost accounting.
- f. Describe reporting and documentation requirements.
- g. Annual planned project list.

VI. FIRE MANAGEMENT ORGANIZATION AND RESPONSIBILITIES

- A. Describe the organizational structure of the park fire management program and display a chart of each member's role and responsibility.
- B. FIREPRO Funding.
- C. Relate the fire management organization to the rest of the NPS unit's organizational structure.

- D. State that the park superintendent is responsible to periodically assess and certify by signature that continued management of wildland fire use actions is acceptable. The park superintendent under certain conditions may delegate this responsibility to another organizational level.
- E. Describe interagency coordination needed to implement the Fire Management Plan.
- F. List key interagency contacts by function.
- G. List and describe all fire-related agreements (put copies of all referenced agreements in the Appendix or Addendum, including equipment rental agreements and contract suppression and prescribed fire resources).

VII. FIRE RESEARCH

- A. Summarize previous and ongoing fire research directly related to the NPS unit.
- B. From Cultural and Natural Resource Management Plans, summarize fire research needed to implement or refine the fire management program. Note other fire research needed but not included in the Resource Management Plan.

VIII. MONITORING

- A. All units implementing fire use activities must develop short and long term monitoring programs to assess accomplishments and to determine effects of management activities on cultural and natural resources.
- B. The NPS Fire Monitoring Handbook is recommended as a source document providing monitoring procedures that meet NPS needs. Monitoring protocols must be reviewed and approved at the regional office level before receiving funding.
- C. Develop a fire monitoring plan as an appendix to the fire management plan (see RM-18, Chapter 11).

IX. PUBLIC SAFETY

- A. Describe all public safety issues and concerns (highways, developments, evacuation plans, etc.).
- B. Describe procedures for mitigating safety issues.

X. PUBLIC INFORMATION AND EDUCATION

- A. Describe public information capabilities and needs to implement the fire management program.
- B. Describe "step-up" public information activities and capabilities in response to escalating fire danger, fire activity, and/or public and media scrutiny (see section IVC2, of this chapter).

XI. PROTECTION OF SENSITIVE RESOURCES

- A. Summarize Archeological/Cultural/Historic Resources requiring sensitive treatment or special protection.
 - Describe actions to prevent or mitigate negative impacts to these resources.
- B. Describe natural resources or features requiring special treatment or consideration in fire planning and project implementation (e.g. threatened or endangered species, riparian areas, visual air quality of important park scenic resources, etc.).
 - Describe actions to prevent or mitigate negative impacts to these resources.
- C. Describe developments, infrastructure, inholdings, and other improvements that require special consideration or protection.
 - Describe actions to prevent or mitigate negative impacts to these resources.

XII. FIRE CRITIQUES AND ANNUAL PLAN REVIEW

Describe standards and procedures for project, program and Fire Management Plan reviews. Include time frames and responsible parties for each type of critique or review (see RM-18, Chapter 13).

XIII. CONSULTATION AND COORDINATION

List all significant contributors and reviewers of the plan. List all individuals and organizations consulted during plan development.

Fire Management Plans

XIV. APPENDICES

- A. References cited.
- B. Definitions.
- C. Species lists.
- D. NEPA and NHPA compliance.
- E. Any other unit-specific supplemental information (require annual revision).
 - 1. Fire call-up list.
 - 2. Preparedness inventory.
 - 3. Cooperative agreements.
- F. Wildland and Prescribed Fire Monitoring Plan.
- G. Preattack plan.
- H. Long-term prescribed fire and hazard fuel reduction plan.
 - 1. Multi-year prescribed fire schedule.
 - 2. Hazard fuels reduction areas and schedule (include proposed treatment techniques).
- I. Fire Prevention Plan (see RM-18, Chapter 8).
- J. Rental Equipment Agreements.
- K. Contracts for Suppression and Prescribed Fire Resources.